REMARKS

Claims 1-4 are pending in the present application, with claims 1 and 2 being the independent claims.

By way of background, in the September 2, 2005 Official Action, the present application was withdrawn from allowance due to a new obviousness rejection based on a combination of newly found art, namely U.S. Patent No. 5,872,973 (Mitchell) in view of U.S. Patent No. 6,690,761 (Lang). In this regard, initially, Applicants wish to gratefully acknowledge the reconsideration and withdrawal of the previous rejections based on Mitchell and Lang.

In the present Official Action, dated January 23, 2006, claims 1-4 were rejected under 35 U.S.C. § 103 over newly found U.S. Patent No. 6,405,317 (Flenley) in view of U.S. Patent No. 6,151,637 (Phillips). The outstanding rejection to claims 1-4 based on Flenley and Phillips is respectfully traversed in view of the following remarks.

Summary of the Invention

Prior to Applicant's invention, to track access to a server object by client objects, server objects required the addition of code specifically directed to supporting the unique identification of client objects. Similarly, each client object needed to be programmed to receive and provide its unique identification.

Advantageously, with Applicant's invention, existing server objects can be used in such a way that each client object can be individually identified when it invokes a function. No modification to existing server class definitions and client class definitions is necessary.

Applicant's client tracking system provides a derived client tracking server class that includes an overriding implementation of a query function of the server class. The overriding implementation instantiates a phantom server object and returns a pointer to the instantiated phantom server object. The phantom server object has functions that correspond to and override the functions of the server class. These overriding functions perform custom processing on a client-by-client basis and forward their invocation to the corresponding functions of the server object. When a client invokes the query function of the client tracking server object, a pointer to a phantom server object is returned. From then on, when that client invokes a function of the phantom server object, custom processing can be performed for that client.

As described at paragraph [0058] of the present application, for instance, Figure 11 is a flow diagram of the query interface function of the client tracking server class, corresponding to the query interface function of the IUnknown interface. This function is passed the identification of an interface and returns a pointer to the interface. The implementation of this function in the client tracking server class, which inherits the server class, overrides the implementation of this function in the server class.

In one embodiment, the client tracking system specifies a phantom manager class for controlling the instantiation and destruction of the phantom server objects. The phantom manager class may provide a create function that, when invoked by the query function of the client tracking server object, instantiates a phantom server object and returns a pointer to the phantom server object. The phantom manager class may also provide a phantom going away function that, when invoked by a destructor of a phantom server object, performs custom processing upon destruction of a phantom server object.

In this regard, **a developer who wants to track client accesses to a server class that is already defined may specify a derivation of the server class, referred to as a "client tracking server class."** The developer may provide an overriding function of the query function as part of the client tracking server class. The developer may also provide an implementation of the create function and the phantom going away function of the phantom manager class that are tailored to the server class. In addition, the developer may provide implementations of the functions of the server class as part of the phantom server object. These implementations of functions of the phantom server object may perform the desired custom processing on a client-by-client basis.

Rejection under 35 U.S.C. § 103

As mentioned, claims 1-4 stand rejected under 35 U.S.C. § 103 as allegedly obvious over Flenley in view of Phillips.

Advantageously, with Applicant's invention, existing server objects can be used in such a way that each client object can be individually identified when it invokes a function. No modification to existing server class definitions and client class definitions are thus necessary.

In contrast, neither Flenley (directed to a security module for a transaction processing system) nor Phillips (directed to using a transaction processor interoperability component to format transactions for a particular transaction processor that processes transactions for an application) provide these benefits of the invention, whether taken alone or in combination. Thus, Applicant respectfully traverses the outstanding rejection at least based on the following remarks.

Without conceding the propriety of the combination of Flenley and Phillips, Applicant respectfully submits that Flenley is deficient as a root reference for the obviousness rejection applied to Applicant's claims, at least as follows:

In the Official Action, on pages 3 and 4 (paragraphs 3 and 4), the description found at Col. 4, lines 5-10 of Flenley relating to "the client object monitors the server master queue" is applied to Applicant's claims as allegedly disclosing "a client tracking server object derived from a server class that provides an implementation of a query interface function," as recited in claims 1-2. However, Applicant merely finds Col. 4, lines 5-10 of Flenley to state the following:

> A client object 44 runs in its own thread and is responsible for creating and managing the supported service provider modules 30 below it [in Fig. 3]. **The client object 44 monitors the server master queue 43 and when it detects an inbound packet for one of its managed hardware devices, it moves the packet from the queue 43 on to a private queue 45 associated with a target device**.

In this regard, Applicant respectfully disagrees that client object 44 of Flenley can be said to teach or suggest "a client tracking server object derived from a server class that provides an implementation of a query interface function," as recited in claims 1 and 2 of Applicant's invention.

First, client object 44 is quite expressly <u>not</u> a server object, and thus cannot be said to be a client tracking <u>server object</u>. This is clear from consulting Fig. 3 of Flenley. Second, there is no indication whatsoever in Flenley that client object 44 is <u>derived from any server class</u> (mainly because it is a client object not deriving from any discernible server class). Still further, there is no disclosure or suggestion in Flenley that client object 44 <u>provides an implementation of a query interface function</u>.
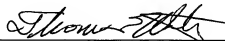
Thus, it is beyond Applicant's appreciation how Flenley, taken alone or in combination with Phillips, can be said to teach or suggest "a client tracking server object derived from a server class that provides an implementation of a query interface function," as recited in claims 1 and 2. Phillips was cited for reasons unrelated to the above-described deficiency of root reference Flenley, but also does not teach or suggest "a client tracking server object derived from a server class that provides an implementation of a query interface function." Claims 3-4 depend from claim 1, and are believed allowable for the same reasons.

Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 103 is respectfully requested.

CONCLUSION

Applicant believes that the present reply is responsive to each of the points raised by the Examiner in the Office Action, and submits that claims 1-4 of the application are in condition for allowance. Favorable consideration and passage to issue of the application at the Examiner's earliest convenience is earnestly solicited.

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